



NFC-Enhanced Slip Case for Smartphones

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TOOLS:

- [Android phone with NFC support \(1\)](#)
- [Basic sewing tools \(needle, thread, scissors, pins\) \(1\)](#)
- [Marker \(1\)](#)
- [Pencil or pen \(1\)](#)
- [Ruler \(1\)](#)
- [Scissors \(1\)](#)
- [Scotch tape or paper glue \(1\)](#)
- [Sewing Machine \(recommended but optional\) \(1\)](#)



PARTS:

- [8-1/2x11 in. piece of paper \(1\)](#)
- [Craft felt \(1\)](#)
- [Foam sheet \(1\)](#)
- [NFC stickers \(the anti-metal kind\) \(4\)](#)
- [Radio Frequency blocking fabric \(1\)](#)

SUMMARY

Once you have all the materials gathered, this project should take about an hour to complete (or slightly more, depending on your sewing skills).

You'll learn how to make a slip case for any smartphone but the magic is in the ability to

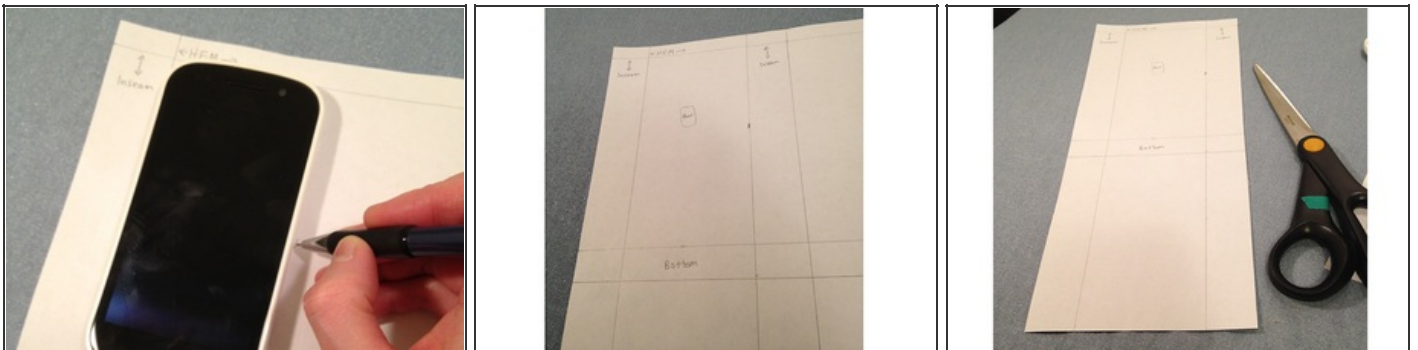
utilize NFC (near-field communication) stickers and near-field radio-frequency blocking fabric to create a multi-functional case for someone always on the go.

Step 1 — NFC-Enhanced Slip Case for Smartphones



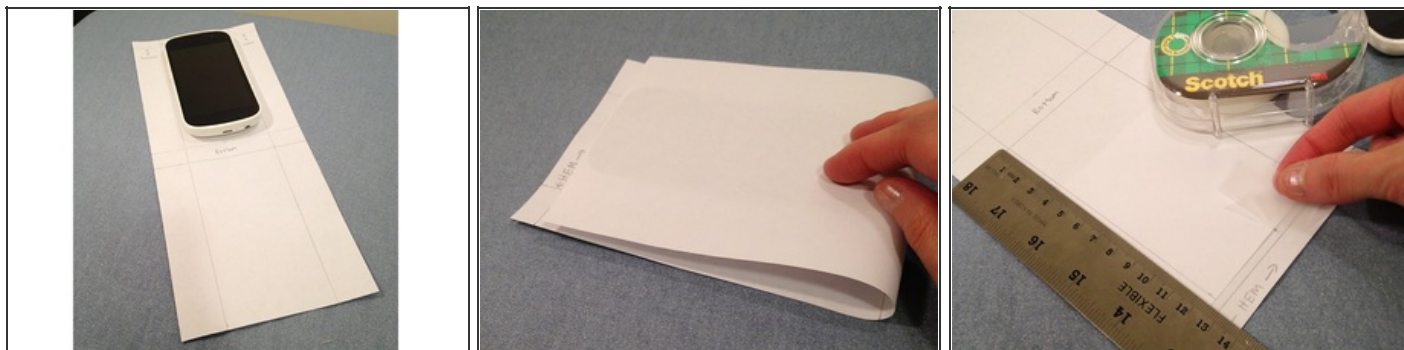
- This NFC-enhanced slip case is constructed out of felt and sheet foam. Inside the case are 4 strategically placed NFC stickers stuck onto special metalized fabric that blocks the radio waves of NFC chips. This allows the case to have up to 4 sets of automated tasks assigned to it (versus 2).

Step 2



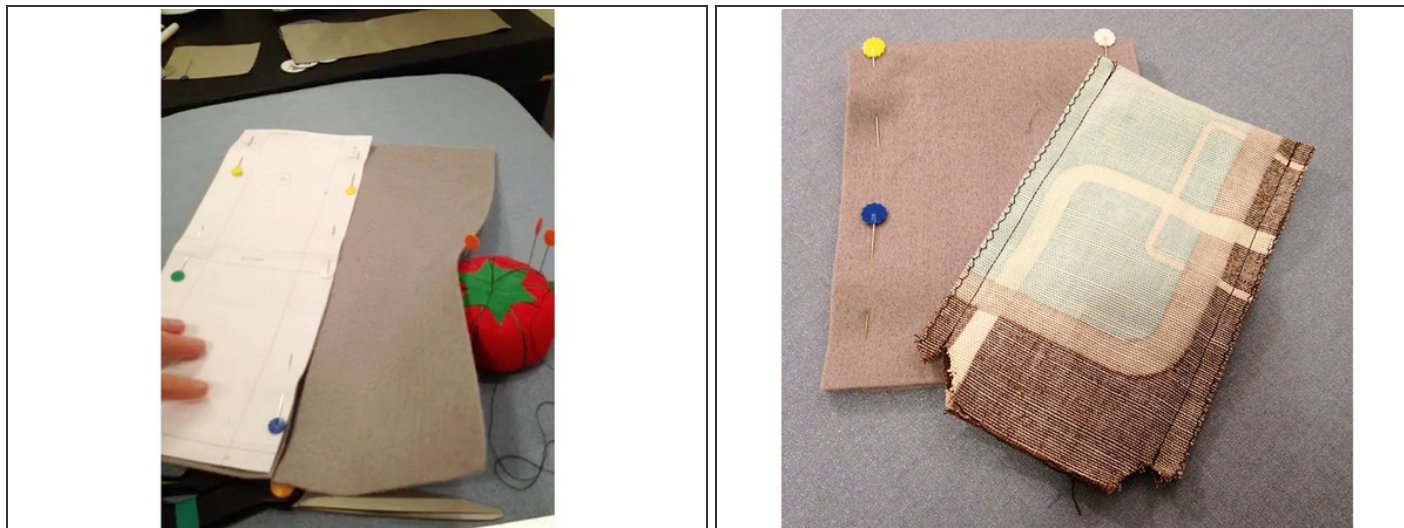
- Use your phone to make a template.
 - (1) Add 1cm or 1/4" to the top as a hem.
 - (2) Add about 1cm PLUS the thickness of your phone as inseams on either side of the phone. For me, since the Nexus S is about 1.5cm at its thickest part, my inseams were 2.5cm or 1".
 - (3) Add allowance for the thickness of your phone at the bottom of the template.
- Cut out the template so it's long and vertical.

Step 3



- Depending on your phone (since they are getting bigger and bigger), you might notice that if you place the phone on the template and fold it over that you'll need to extend the template length a bit.
- Use some excess paper and scotch tape or glue to extend it. Make sure to add a 1cm hem at the bottom to match the top.

Step 4



- Use the template to cut out your outer layer fabric or felt.
- Fold in half and pin. Remember that if your fabric has a "right" and a "wrong" way, make sure that you fold the fabric with the right way facing each other because you're going to be sewing the sides and then flipping it inside out.

Step 5



- Moving onto the inside layer, cut out the foam but exclude the hem and inseam allowances.
- You want to use foam as a layer, not only for the extra protection, but because your finger can typically trigger screen events through regular fabric. The foam will block your finger presses and swipes from going through.
- Fold the foam in half and insert into the outer fabric. Then insert your phone. Repin the fabric so the fit is a bit snug but allows you to slip your phone in and out without much struggle.

Step 6



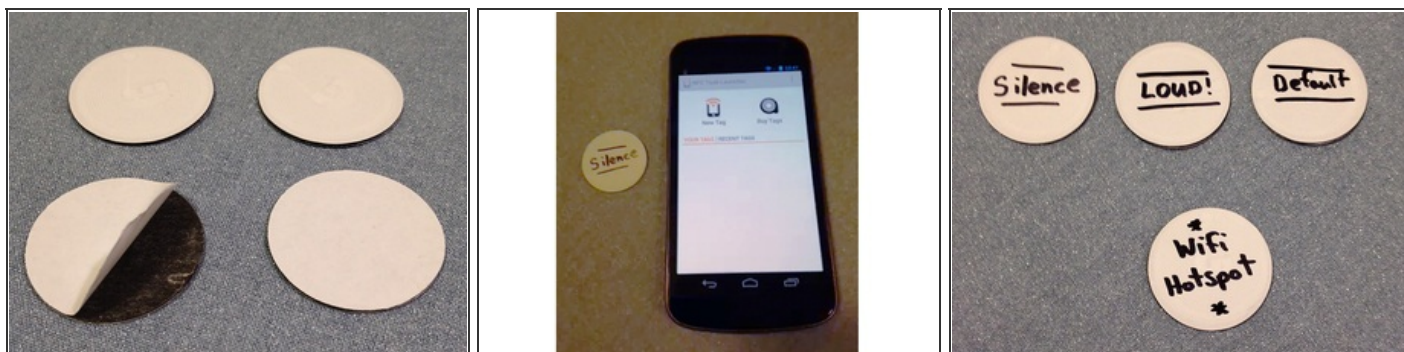
- Head over to the sewing machine. If you don't have a sewing machine you could do this by hand. Sew the inseam but start your stitch 1cm down from the top to allow for the hem to be folded down.
- When you're done sewing, trim off the excess fabric in the inseam but don't get in too close to the stitch -- make sure there's a little bit of breathing room.

Step 7



- Flip the fabric right-side out and put the foam back in. Then re-insert your phone. Ta da! It fits!

Step 8



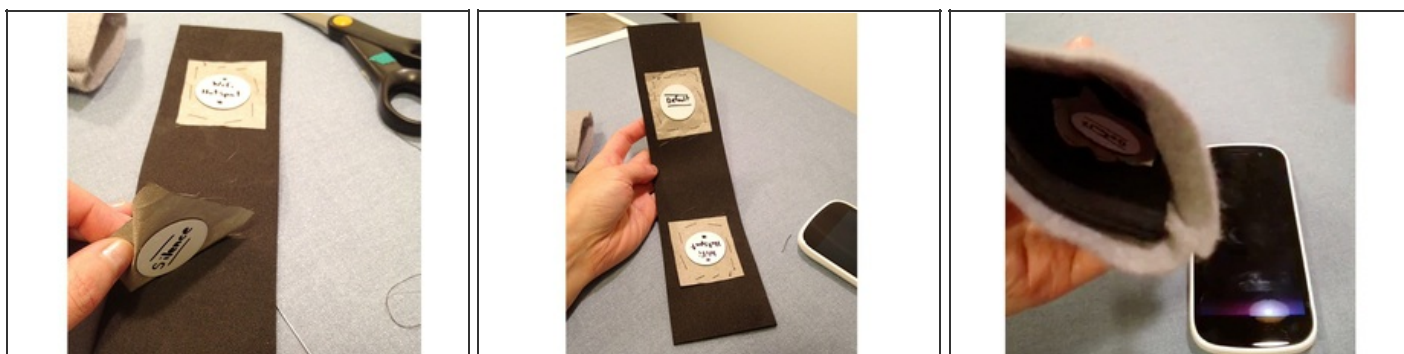
- Install an Android app called NFC Task Launcher. Download here: <https://play.google.com/store/apps/detail...>
- Using anti-metal NFC tags, record 3 tags for putting your phone into silent mode, very loud, and a default settings. Record a 4th bonus tag with another task you might use often, such as putting your phone into wi-fi hotspot mode.
- And remember that these are re-writable NFC tags so if you change your mind later, you can re-record new tasks.

Step 9



- Cut out 2 small squares from the RF-blocking fabric.
- For one of the squares, peel off the back of the "silence" tag and stick it to the middle of the fabric. On the other side of the same fabric, place the "default" tag.
- For the other square, place "loud" and "wi-fi".
- Take the foam out of the felt and sew the loud/wi-fi patch to the foam. It's important that the loud side is facing inwards!!
- No one is going to see the stitching so it's okay if you're a bit sloppy. :) Just make sure it's in there securely.

Step 10



- Repeat for the silence/default patch and make sure "silence" is facing inwards.
- When you're done, fold the foam and put it back into the outer felt layer.
- Test your almost-finished case with your phone! This is a also a good time to mark the sides of the case with icons or decals so you know which side is which!

Step 11



- Final step is to finish the opening! You can fold the felt over the foam and hand-sew to make a clean hem.
- But I kind of liked this grey and black layering and evened the felt up with the foam, then hand-stitched with purple thread.
- And that's it! Yay! Sexy and functional.

Step 12

- Add a solar panel to it so it can charge your phone while in the sun . It's now protected by the uv light and charging . Pocket charger.

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